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PTO/SB/01 (10\_00)

Approved for use through 10/31/2002. OMB 0651-0035

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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**DECLARATION FOR UTILITY OR  
DESIGN  
PATENT APPLICATION  
(37 CFR 1.63)**



Declaration  
Submitted  
with Initial  
Filing

OR



Declaration  
Submitted after initial  
Filing (surcharge  
(37 CFR 1.16(e))  
required)

Attorney Docket Number

BP3036.1

First Named Inventor

Ba-Zhong Shen, Ph.D.

**COMPLETE IF KNOWN**

Application Number

Filing Date

Group Art Unit

Examiner Name

**As a below named inventor, I hereby declare that:**

My residence, mailing address, and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Iterative metric updating when decoding LDPC (Low Density Parity Check) coded signals and LDPC coded modulation signals

(Title of the Invention)

the specification of which



is attached hereto

OR



was filed on (MM/DD/YYYY)

as United States Application Number or PCT International

Application Number

and was amended on (MM/DD/YYYY)

(if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checkign the box, any foreign application for patent or inventor's certificate, or any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Applications Numbers(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached?	
				YES	NO
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto:

I hereby claim the benefit under 35 U.S.C. 119 (e), 120, or 365 (c) of any U.S. or PCT application(s) listed below.

Application Numbers(s)	Filing Date (MM/DD/YYYY)	<input type="checkbox"/> Additional application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.
60/384,698	5/31/2002	
10/264,486	10/4/2002	
60/478,690	6/13/2003	

SEND TO: Assistant Commissioner for Patents, Washington, DC 20231

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## DECLARATION - Utility or Design Patent Application

Direct all correspondence to: ☒ Customer Number or Bar Code Label 34,399 OR ☒ Correspondence address below

Name Shayne X. Short, Ph.D.

Address P.O. Box 160727

Address

City Austin

State TX

ZIP 78716-0727

Country USA

Telephone (512) 825-1145

FAX (512) 394-0054

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.c. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

NAME OF SOLE OR FIRST INVENTOR:

☐ A petition has been filed for this unsigned inventor

Given Name (first and middle [if any]) Ba-Zhong

Family Name or Surname Shen, Ph.D.

Inventor's Signature

Date 9/15/03

Residence: City Irvine

State CA

Country USA

Citizenship China

Mailing Address 22 Wyoming

Mailing Address

City Irvine

State CA

ZIP 92606

Country USA

NAME OF SECOND INVENTOR:

☐ A petition has been filed for this unsigned inventor

Given Name (first and middle [if any]) Hau Thien

Family Name or Surname Tran

Inventor's Signature

Date 9/15/03

Residence: City Irvine

State CA

Country USA

Citizenship USA

Mailing Address 19 Purple Sage

Mailing Address

City Irvine

State CA

ZIP 92612

Country USA



Additional inventors are being named on the \_\_\_\_\_ supplemental Additional Inventor(s) sheets(s) PTO/SB/02A attached hereto.

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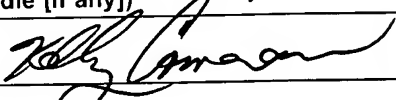
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<b>NAME OF THIRD INVENTOR:</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
<b>Given Name</b> (first and middle [if any]) Dr. Kelly Brian		<b>Family Name</b> or Surname Cameron	
<b>Inventor's Signature</b> 		<b>Date</b> 7/15/03	
<b>Residence: City</b> Irvine	<b>State</b> CA	<b>Country</b> USA	<b>Citizenship</b> USA
<b>Mailing Address</b> 4171 Blackfin			
<b>Mailing Address</b>			
<b>City</b> Irvine	<b>State</b> CA	<b>ZIP</b> 92620	<b>Country</b> USA
<b>NAME OF FOURTH INVENTOR:</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
<b>Given Name</b> (first and middle [if any])		<b>Family Name</b> or Surname	
<b>Inventor's Signature</b>		<b>Date</b>	
<b>Residence: City</b>	<b>State</b>	<b>Country</b>	<b>Citizenship</b>
<b>Mailing Address</b>			
<b>Mailing Address</b>			
<b>City</b>	<b>State</b>	<b>ZIP</b>	<b>Country</b> USA
<b>NAME OF FIFTH INVENTOR:</b>		<input type="checkbox"/> A petition has been filed for this unsigned inventor	
<b>Given Name</b> (first and middle [if any])		<b>Family Name</b> or Surname	
<b>Inventor's Signature</b>		<b>Date</b>	
<b>Residence: City</b>	<b>State</b>	<b>Country</b>	<b>Citizenship</b>
<b>Mailing Address</b>			
<b>Mailing Address</b>			
<b>City</b>	<b>State</b>	<b>ZIP</b>	<b>Country</b>

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## POWER OF ATTORNEY OR AUTHORIZATION OF AGENT

Application Number

Filing Date

First Named Inventor

Group Art Unit

Examiner Name

Attorney Docket Number

Ba-Zhong Shen, Ph.D.

BP3036.1

I hereby appoint:



Practitioners at Customer Number

34,399

Place Customer  
Number Bar Code  
Label Here



OR

Practitioner(s) named below:

Name	Registration Number
Shayne X. Short, Ph.D.	45,105
Bruce E. Garlick	36,520
James A. Harrison	40,401
Timothy W. Markison	33,534

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

Please change the correspondence address for the above-identified application to:



The above-mentioned Customer Number.

OR



Firm or  
Individual Name

Shayne X. Short, Ph.D.

Address

P.O. Box 160727

Address

City

Austin

State

TX

Zip

78716-0727

Country

USA

Telephone

(512) 825-1145

Fax

(512) 394-0054

I am the:



Applicant/Inventor.



Assignee of record of the entire interest. See 37 CFR 3.71  
Statement under 37 CFR 3.73(b) is enclosed (Form PTO/SB/96).

SIGNATURE of Applicant or Assignee of Record

Name

Signature

Date

title:

Manager, IP Portfolio

9-23-2003

NOTE:

Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required.  
Submit multiple forms if more than one signature is required, see below\*.



\*Total of 1 forms are submitted.

SEND TO: Assistant Commissioner for Patents,  
Washington, DC 20231

**Certificate Under 37 CFR 3.73(b)**

Applicants:

Ba-Zhong Shen, Ph.D.

Hau Thien Tran

Dr. Kelly Brian Cameron

Entitled: **Iterative metric updating when decoding LDPC (Low Density Parity Check) coded signals and LDPC coded modulation signals**

Application No.

Filing Date:

**Broadcom Corporation**

(Name of Assignee)

**a, California Corporation**

(Type of Assignee)

states that it is :

1. ☒ the assignee of the entire right, title, and interest; or
2. ☐ an assignee of an undivided part interest

in the patent application/patent identified above by virtue of either :

- A. ☒ An Assignment for the inventor(s) of the patent application/patent identified above. The assignment was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

OR

- B. ☐ A chain of title for the inventor(s) of the patent application/patent identified above to the current assignee as shown below:

1. From \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
2. From \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
3. From \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

- ☐ Additional documents in the chain of title are listed on a supplemental sheet.
- ☒ Copies of assignments or other documents in the chain of title are attached.
- [NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the PTO. See MPEP 302-302.8]

The undersigned (whose title is supplied below) is empowered to act on behalf of the assignee.

Date:

9-23-2003

Name:

Dee Henderson

Manager, Intellectual Property Portfolio

Title:

Signature:

